

## MX1, MX2 Active Mixer Preamp for Magnetic- and Piezo- Pickups

**Low Noise Studio Quality :: High Quality Dustproof Pot. :: Rugged and Shielded :: Input Screw Terminals**

The RICHTER MX1, MX2 active mixer preamp combines two buffered high impedance inputs via a blend potentiometer to one output.

In the center position – provided by a center click – the input signals have the same level.

An additional cermet trim pot in channel 1 of the MX2 circuit provides a matching between both input signal levels by attenuation the IN1 signal.

Two screw terminals for easy and solder free connection of signal sources - magnetic- or piezo-pickups are a guarantee for quick and easy mounting inside your instrument – ideal for luthiers and replacement.

This fully shielded circuit requires no shielding inside the instrument.

We use only the best quality components on market available.

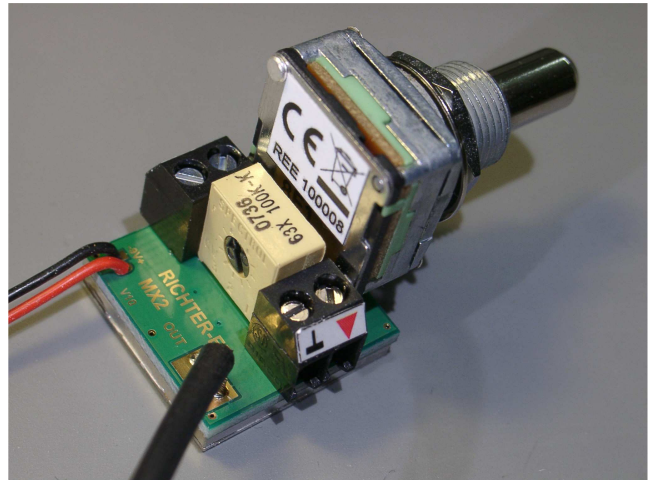
### Features:

- Low noise, high definition amplifier design with precise and smooth sound reproduction without signal losses.
- Discrete class A input sections with hand selected and matched FETs.
- 0,1% precision metal film resistors in the signal path with a resultant noise factor of up to 10 times lower than standard thick film resistors.
- Low tolerance film and COG capacitors in the signal path featuring lowest distortion and superior linearity.
- Rugged high quality blend potentiometer with center click
- Cermet trimming potentiometer (INPUT1) for input level matching - MX2 only
- Screw input terminals with marking for signal-input (red) and GND (black)
- Completely shielded and encapsulated - no shielding inside the instrument required.

After manufacture each unit undergoes a throughout test and inspection. This ensures each unit passes strict quality standards. Serial number is carried out for traceability purposes.

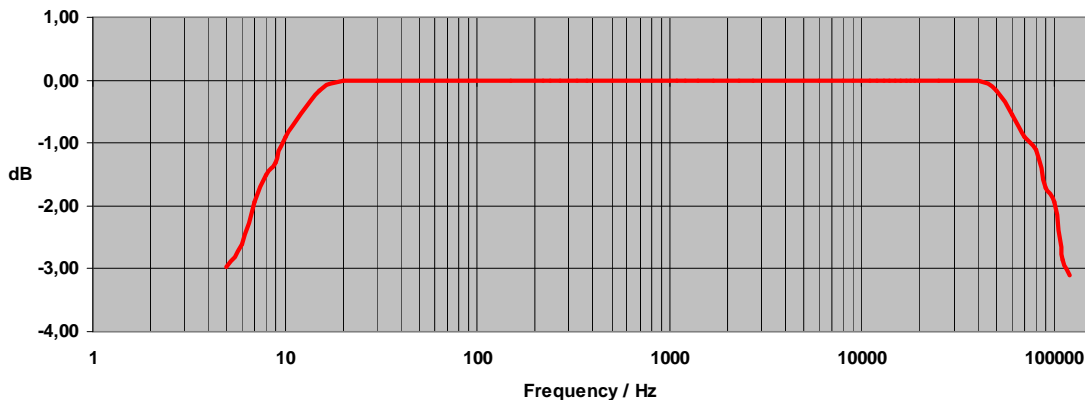
### Technical Data:

- Input Impedance : 2,2 M $\Omega$ , IN1, IN2
- Output Impedance : 100 k $\Omega$
- Frequency Range : 5 Hz to 110 kHz, -3dB
- Supply Voltage : 9V to 18V
- Current Consumption : 850 $\mu$ A
- Blend Potentiometer : with center click
- MX2 only, Input 1 : Level matching via trim pot.
- Dimensions : L 20 x W 20 x H 24 mm
- Weight MX1 : 25 g
- Weight MX2 : 26 g
- Reverse Polarity Protection
- Input screw terminals
- Output wiring : 150mm
- Power supply wiring : 150mm



MX2 active mixer preamp

### Frequency Range MX1, MX2, Uin=1V, both inputs



## Installation Guide:

Installation of the RICHTER MX1, MX2 circuit will require some basic soldering skills for the output wiring. Instead not being difficult, professional installation is recommended.

The Pickups have to be connected via the input screw terminals. The MX2 circuit provides a trimming potentiometer for a level matching by signal attenuation. You should connect the pickup with the stronger signal to input1. In general piezo pickups provide stronger signal levels compared to magnetic pickups.

**ATTENTION:** Excessive heat and / or incorrect soldering equipment usage or selection may damage the electronics. Do not solder more than 5 seconds on PCB pad terminals or potentiometer pad terminals. The input terminals could be broken by screwing with excessive power.

Richter Electronic Engineering is not responsible for any damages which are caused by improper installation. Please don't hesitate to contact us, if you have questions or comments.

**Our components and the wiring are shielded. Guitars / Bases instrument control cavity do NOT need a shielding with our electronic components.**

## Possible Wiring:

